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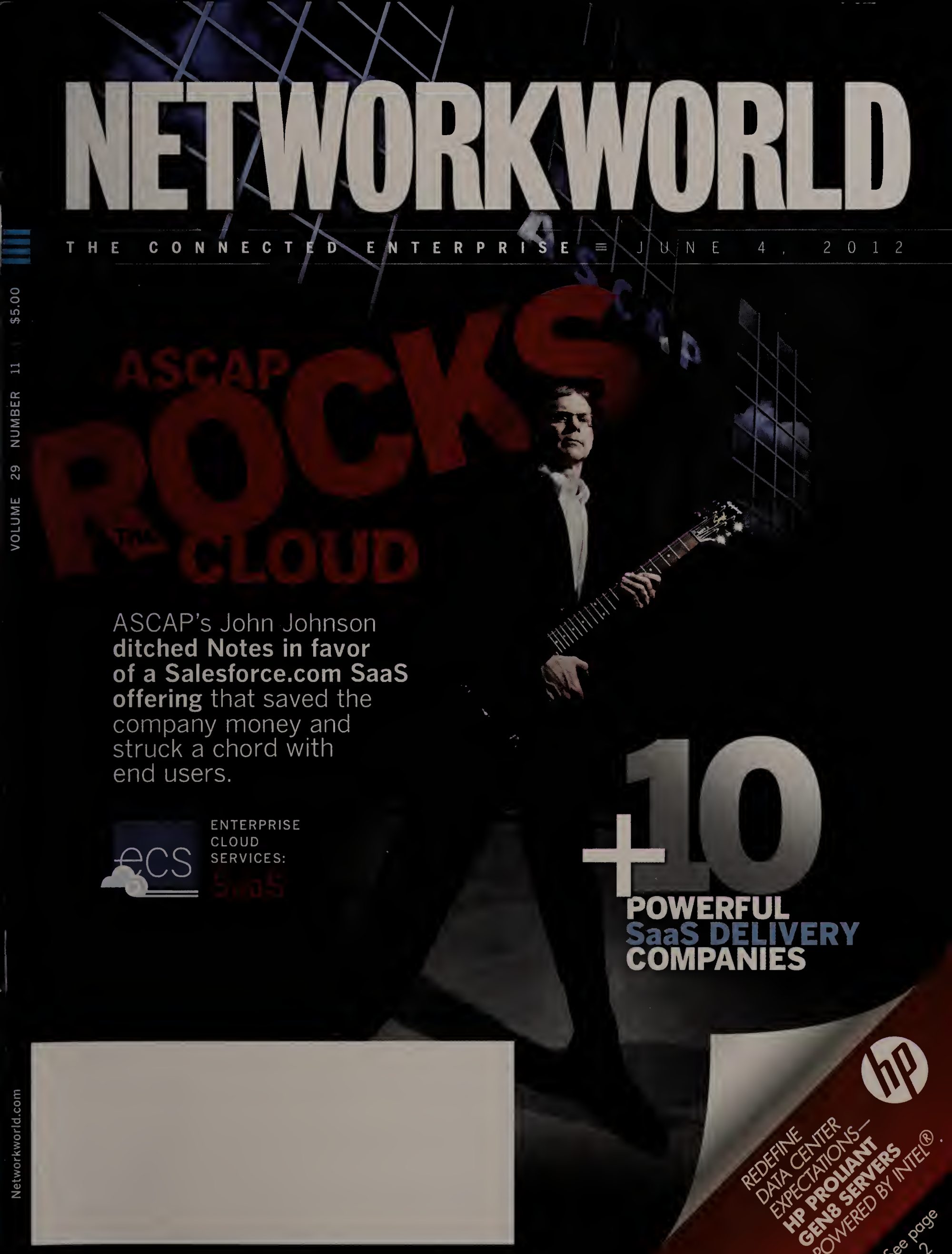

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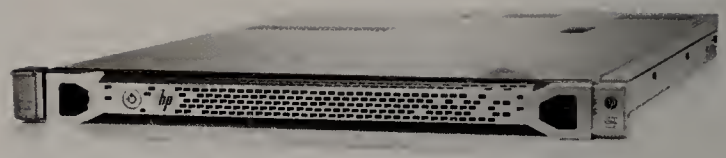

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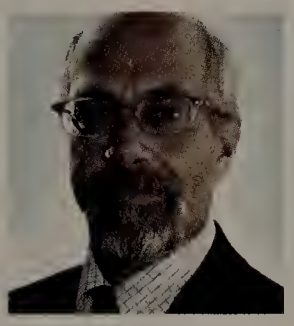
FROM THE EDITOR | JOHN DIX

Vendors as partners, a year later

Ken Piddington, CIO of Global Partners, the leading wholesale distributor of refined petroleum products in New England, recently hosted his second annual Strategic Partner Summit, the cornerstone event of an ambitious vendor relationship program he put in place last year to change the way his company works with suppliers.



The key takeaway: It's working, and vendors are excited to be part of it.

It all started because Piddington was sick of event-driven vendor relationships, with contact limited to sales efforts or problem resolution. The program he put in place was designed to get suppliers to "actively contribute to the success of the organization through quality service delivery and innovation" (see a full Q&A at tinyurl.com/3s3mq29).

The annual Summit dinner, one of multiple touch points throughout the year, is used to give suppliers a company update and celebrate a handful of vendors that have gone above and beyond, one of the givebacks for participating in the program. The dinner attracted more than 100 people from 33 vendors, and everyone I talked to gave the whole concept glowing reviews.

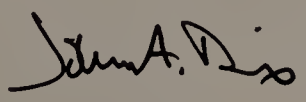
For example, Michal Peliwo, director of business solutions at ZEMA, a strategic consulting and software development firm, was down from Canada for the meeting and said it was the first time he had ever been part of something like this. "This is great because you get their vision for the year, and it helps us make sure we can keep providing value."

Eric Grueter, a systems engineer at NetApp, says he really values having this kind of relationship with a buyer "because you get to see the whole ecosystem. Normally you just see a small slice, so this gives us a much broader idea of their needs."

NetApp, in fact, took home Global's vendor award for Innovation, with Piddington saying NetApp really helped identify new ways of looking at technology. Other vendors honored included: Data Dynamics, a supplier of laptops and other gear, which won the Customer Service award, with Piddington saying he now treats them as an extended part of the IT staff; CA, which earned the Teamwork/Collaboration award for "bringing experts out to team with us to move the company forward"; and the Strategic Partner of the Year award was bestowed on Telvent DTN for the many ways the company has helped Global automate its fuel distribution terminals.

All told, Piddington credits the vendor program with saving the company $400,000, dramatically improving vendor relationships and measurably improving quality of service levels. That's hard to beat.

Even once-reluctant vendors are now stepping up. Oracle's lack of partnership cost it "significant revenue" last year in terms of projects shelved or shifted to other suppliers, Piddington says. "Now they are here in force."



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peersay

Social media security quagmire

I RECENTLY READ the Special Focus article on social media from the May 21 issue ("Social media brings business, but complicates security"; tinyurl.com/8ayzqxn). Thank you for such an on-point article.

I work at a community bank. With the staffing level at present, the IT group is nimbly able to quickly review Internet usage for appropriate and not-so-appropriate usage. We also have limited access to the social media sites, Facebook to note one, to management unless the employee is tasked to a special project. In this restriction, the management is able to ensure work time is truly work time vs. a person posting for three hours during non-lunch times. The unproductive time and costs can be substantial when reviewing the activity for an entire year.

There truly is no need to allow the employees to run rampant through social media sites. There are simply too many opportunities for third parties to gain access to your data via the employee clicking on a new game or cute icon. These may be authenticated by the Facebooks, but the click may allow unapproved access.

The author also notes the legal liability involved. This can be relatively serious not only in dollar amount but also reputational risk and a lower community rapport. The employee could post a personal thought on another business. This could be entirely factual, but viewed as libelous. For instance, the employee could post that their lunch at the restaurant down the street has the worst food ever and the patrons are being ripped off. The business does not want to be known by one employee's posting on a social media site, done on company time on a company computer if this garners a substantial amount of negative attention.

Although social media is beneficial and a fantastic venue to give personal opinions and updates, there are potentially issues. Overall, the article was not only informative but thought-provoking.

Charles Parker II

DaaS is conceptually flawed

THE PROBLEM WITH the DaaS concept is that you are clinging to old technologies, and missing the opportunity to improve and update your current systems. You already have Google Apps and MS360, which give you your office suite without the need of desktop software (Re: "Consider desktops in the cloud for BYOD"; tinyurl.com/7mdrjhd).

Keeping you business software desktop-dependent will mean that in future you will have a couple of different development streams doing the same front-end stuff, i.e. your desktop team, your mobile team (two of them, one for iOS and one for Android), and then you still have your Web developers.

Rather, invest your efforts in converting your desktop applications to HTML5 interfaces. You can then use one team to make sure that your applications function on the desktop, mobile and Web. This will enable cost-saving, and you may eventually move to a desktop model that is independent of the OS.

nicopretorius

IPv4's place in the free market

THIS PIECE SHOULD consider why a market-based approach is being adopted (Re: "Sales of unused IPv4 addresses gathering steam"; tinyurl.com/cjod25b).

> A well-functioning, transparent marketplace for IPv4 [is the best way] of avoiding scarcity and hoarding.

A market is the most efficient mechanism of transferring resources from those who have surpluses to those who have shortages, and consequently maximizes the collective utility of its participants. A well-functioning, transparent marketplace for IPv4 is the most objective, viable manner (with extensive economic precedent on its side) of avoiding scarcity and hoarding, as well as the best way of ensuring IPv6 is adopted naturally and has the smallest impact to business continuity globally.

This market is the very natural evolution of this unavoidable IPv4 depletion circumstance that, we hope, business leaders will increasingly pay attention to.

Louis Sterchi

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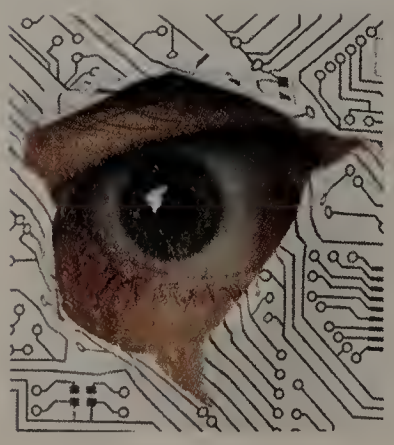
bits

Global 'Net traffic to surpass 1 zettabyte in 2016

GLOBAL IP TRAFFIC will reach an annual rate of 1.3 zettabytes in 2016 as more people connect more devices and download more video over the Internet, Cisco predicts. The Internet traffic in 2016, at 110 exabytes per month, will be 10 times the traffic in 2008, said Doug Webster, senior director for service provider marketing, during the unveiling of Cisco's Visual Networking Index Forecast. Global IP traffic in 2011 was about 369 exabytes, or 0.369 zettabytes. By 2016, there will be nearly 18.9 billion devices connected to the Internet — 2.5 devices for every person on Earth — up from 10.3 billion connected devices in 2011. Part of the growth will come from devices like television sets and electric meters that haven't traditionally connected to the Internet, Webster said. "Even your dog can now be connected to the Internet, allowing you to track whether Rover is running after the collie or the postman," he said. Oh, and in case you don't know, a zettabyte is equal to 1 billion terabytes. ***tinyurl.com/79ur9aq***

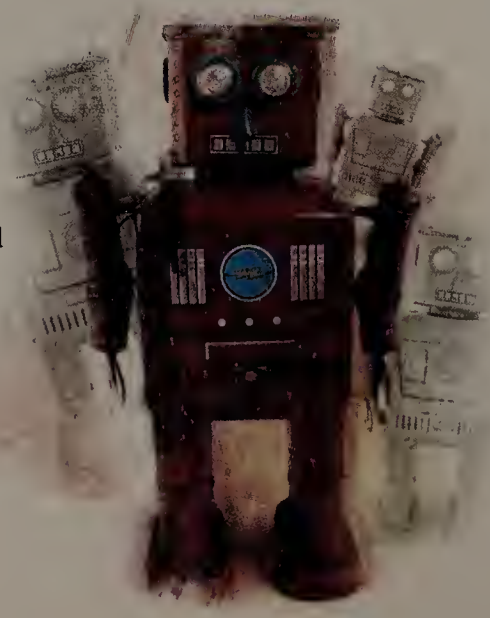


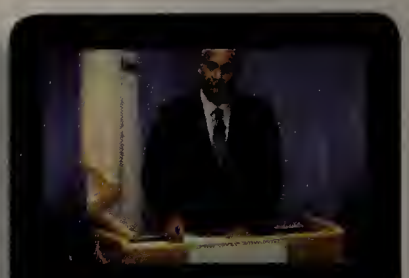
Social media spying at work set to increase

BE CAREFUL what you post. Gartner is predicting a huge rise in the use of tools to monitor employee Internet use, with 60% of companies expected to watch workers' social media use for security breaches by 2015. Today, less than 10% of companies monitor employees use of Facebook, YouTube, LinkedIn and other social media sites for security breaches, although many companies monitor social media for brand management and marketing purposes. Monitoring can help companies avoid problems such as employees posting unauthorized videos of company activities, according to Andrew Walls, research vice president at Gartner. However, "there are other times when accessing the information can generate serious liabilities, such as a manager reviewing an employee's Facebook profile to determine the employee's religion or sexual orientation in violation of equal employment opportunity and privacy regulations," Walls wrote in a report. Another risk? Prying eyes. "The problem lies in the ability of surveillance tools and methods to produce large volumes of irrelevant information," Walls said. "This personal information can be exposed accidentally or become the target of voyeuristic behavior by security staff." ***tinyurl.com/c63gq7g***

White House tackles botnets

THE GOVERNMENT has launched a coordinated effort with several trade groups and private companies to combat botnets and educate affected computer users, the White House announced last week. The new effort to fight botnets will involve a range of activities, including plans to share information among government and private organizations and a nationwide consumer education campaign. "This is much larger than any one company, any specific country, any specific government or any individual," White House Cybersecurity Coordinator Howard Schmidt said during a launch event at the White House. About 5 million computer systems were infected with botnet malware in the first quarter of 2012, according to security vendor McAfee, and roughly one in 10 U.S. computers is thought to be infected with botnet malware today. ***tinyurl.com/cpgs5p7***





IT VIDEO

Massachusetts tackles big data

Intel will establish the new Intel Science and Technology for Big Data at the Massachusetts Institute of Technology. ***tinyurl.com/bpdzo3o***

Juniper retools Web security software

JUNIPER NETWORKS is beefing up the Web security software it obtained in the acquisition of Mykonos Software, adding 30 new features and extensions designed to protect against a wider range of attackers and hacking techniques. The Mykonos Web Security software is designed to dupe attackers by presenting false vulnerabilities to keep them around so it can learn as much about them as possible. New countermeasures include the ability to defend against brute-force authentication attacks that rapidly guess combinations of usernames and passwords; the ability to defend against directory traversal attempts used to map websites to gain additional information on how to attack them; and the integration of third-party software vulnerability protection. tinyurl.com***/cduxuv2***

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Cisco SDN products on tap in June

Cisco officials promise 'significant' programmability rollouts at Cisco Live

BY JIM DUFFY

CISCO WILL make software-defined networking (SDN) product announcements at its Cisco Live conference in June that will show initial steps in how it plans to roll out the fledgling technology.

The products are expected to adhere to Cisco's new Open Programmable Environment for Networking, or Cisco OPEN, SDN architecture. Though product details are unavailable, one of the products may include Cisco Connect, which is designed to improve cloud computing connectivity for branch offices.

"Cisco will be making significant product announcements at Cisco Live," said Shashi Kiran, senior director of Data Center/Virtualization and Enterprise Switching at Cisco, during a wrap-up of prepared remarks during a conference call this week conducted by investment firm Morgan Stanley.

"This is a good transition point for the industry."

Cisco has also promised to add OpenFlow to its Nexus data center switches. And startup/Cisco spin-in Insieme Networks is developing what many believe is the next generation of Cisco's Nexus switching line, with programmability hooks.

"Insieme fits into our strategy; it does not define it," said David Ward, chief architect and CTO of Cisco's Service Provider division.

Kiran and Ward reiterated Cisco's multipronged SDN strategy during the conference call. The officials stressed that SDNs will augment current network and Internet functionality — not replace it — and that customers will adopt various flavors of SDNs based on their particular needs or requirements.

"I'm not sure there is a killer application for SDNs that can't be achieved in architectures today," Kiran said. "Its promise is simplification."

Enterprises could use it to virtualize workloads and implement virtual desktop environments, and orchestrate security profiles for private cloud automation, Ward said. He then outlined the Cisco OPEN architecture, the same one previewed by CTO Padmasree Warrior in her Interop keynote earlier this month.

Cisco OPEN, which is also expected to be officially introduced at Cisco Live, is intended to open up the network with APIs at layers other than just the data and control plane, which is where the popular OpenFlow protocol is targeted. Cisco's SDN architecture harvests network intelligence from the infrastructure, delivers it to an analytics engine which then churns it into orchestration routines for policies, which are then programmed back into the network infrastructure.

Cisco says this architecture will apply to all flavors of SDNs — from direct APIs between applications and the network; to controllers governing OpenFlow-enabled devices and other agents; to virtual overlays between applications and the physical and virtual network.

In this scenario, OpenFlow is but one of many protocols and APIs that can be used to implement SDNs, Cisco officials stressed. And instead of commoditizing its hardware, as many in the industry expect, Cisco says SDNs will create more value for Cisco's ASICs, operating systems, software-based services and partner applications.

"Commoditization happens when you don't deliver value," said Kiran.

Added Ward on SDNs: "It will redefine where we are as a software vendor. It will redefine our software business."

But the benefits for enterprises may have to wait a while. SDNs are a nascent market and the potential of programmability may be currently limited to the more extensive resources and requirements of service providers.

"Overall, SDN promises easier provisioning and simplified management, particularly for service providers such as Verizon and Rackspace," states Morgan Stanley analyst Ehud Gelblum in a bulletin on SDNs. "For now, we believe SDN and OpenFlow still require IT organizations to have substantial technical and engineering capabilities to deploy and as such, remains out of reach for most IT managers." ■

Is Cisco OPEN open?

Going beyond an OpenFlow interface between the forwarding and control plane of switches and routers, Cisco's Open Programmable Environment for Networking – OPEN – SDN architecture seeks to expose interfaces at allother layers of the network so it can be programmed through software.

SOURCE: CISCO SYSTEMS

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Rehearsal is over, IPv6 goes prime time June 6

14 years after next-gen Internet Protocol was created, World IPv6 Launch Day looms

BY CAROLYN DUFFY MARSAN

IPV6 WILL go fully live on June 6. That's the date when 50-plus access networks and more than 2,500 websites — including Google, YouTube, Facebook and Yahoo — will turn on support for the long-anticipated upgrade to the Internet's main communications protocol and leave it on for good.

World IPv6 Launch Day is being coordinated by the Internet Society, which is promoting IPv6 as the best strategy for ensuring that the Internet continues to grow as address space becomes increasingly scarce with IPv4, the original version of the Internet Protocol.

Leslie Daigle of the ISOC says the wait is over for IPv6.

Participants in World IPv6 Launch Day are trying to drive home the message to techies worldwide that it's time to start deploying IPv6.

"If you've been waiting to deploy IPv6, there is no reason to continue waiting," says Leslie Daigle, chief Internet technology officer with the Internet Society (ISOC). "There are customers who will view your website over IPv6 now. It isn't experimental. It's out there for real."

Some of the largest ISPs have signed on for World IPv6 Day, including Comcast, AT&T, Verizon Wireless and Time Warner here in the United States. Each has agreed to enable IPv6 for 1% of their subscribers by Wednesday.

"One percent was chosen as a metric because it is a big deal," Daigle explains. "It represents a serious commitment by the network operators to provide IPv6. In order to get to 1%, you have to have IPv6 enabled on a considerably larger percentage of your customer base because not everybody has a home router that can do IPv6 or equipment that is configured to use IPv6. To get to 1%, [one ISP executive] estimates that you have to have 10% or more of your network enabled."

Equally significant is the participation by content delivery networks such as Akamai and Limelight. Akamai carries between 20% and 30% of the Internet's Web traffic on any given day, so its support of IPv6 is a boon for the new protocol. Among Akamai's customers are Apple, Lands' End, Ticketmaster and Travelocity.

World IPv6 Launch Day is designed to "send enough IPv6 traffic toward content providers to give them confidence that the big access providers are serious about IPv6 and that they should leave it on at their front doors," Daigle says.

Thousands of popular websites have agreed to permanently enable IPv6 by Wednesday. Some, including Facebook, have already turned on IPv6 in production mode. Other World IPv6 Launch Day participants include: consumer-oriented websites such as Bing and Netflix; U.S. government agencies including NASA and the Census Bureau; universities such as Indiana University and the University of Pennsylvania; and network vendors such as Cisco and Check Point.

"World IPv6 Launch Day is a lot larger than people understand," says John Curran, president and CEO of the American Registry for Internet Numbers (ARIN), which doles out IPv4 and IPv6 addresses to network operators in North America. "It's not a small decision for the major content providers to turn on IPv6 and leave it on. From now on, everything they roll out will be on IPv4 and IPv6."

Additionally, four home networking equipment manufacturers — Cisco, D-Link, NDM Systems and ZyXel Communications — have agreed to enable IPv6 by default on their home router products by the June 6 deadline.

"There are other home router vendors that are mostly there [with IPv6 support] but for one reason or another haven't gone through the certification process," Daigle says. "We have definitely met our mark in terms of raising awareness with the CPE equipment vendors that IPv6 is real."

Created in 1998 by the Internet Engineering Task Force, IPv6 offers an expanded addressing scheme but is not backward compatible with IPv4. While IPv4 uses 32-bit addresses and can support 4.3 billion devices connected directly to the Internet, IPv6 uses 128-bit addresses and can connect up a virtually unlimited number of devices: 2 to the 128th power.

The Internet needs IPv6 because it is running out of IPv4 address space. The free pool of unassigned IPv4 addresses expired in February 2011, and in April 2011 the Asia-Pacific region ran out of all but a few IPv4 addresses being held in reserve for startups. The European registry is expected to deplete its supply of IPv4 addresses in August, and ARIN next summer.

Network and website operators have two choices when it comes to IPv6: They can either support both protocols in what's called dual-stack mode, or translate between IPv4 and IPv6. Until now, most have been unwilling to make the upgrades required to support IPv6 because IPv6 traffic has been so scarce.

That's expected to change after June 6, when IPv6 traffic is predicted to surge. While the most recent estimated are that IPv6 represents less than 0.5% of all Internet traffic, participants in World IPv6 Launch Day are hoping to drive IPv6 up to 1% or more of Internet traffic.

"One [college] campus expects that on June 6, 50% percent of its network traffic will be IPv6 because its top four most-visited sites are participating in World IPv6 Launch Day," Daigle says. "It might surprise some enterprises how much IPv6 traffic they will see if their users are going to Google, Facebook or Yahoo."

The anticipated surge of IPv6 traffic after June 6 is expected to bring new security threats along with it.

In February, Arbor Networks reported the first-ever IPv6-based distributed denial-of-service attacks. While IPv6 security incidents remain rare, experts predict that as more Internet traffic flows over IPv6, distributed DoS attacks, malware and other threats will follow.

Experts say enterprise network managers should upgrade their distributed DoS detection, intrusion protection and deep packet inspection systems to support IPv6.

"It's time for the enterprise to make sure that their security devices are IPv6-enabled, that they have the ability to look at IPv6 traffic and to create rules for it and do intrusion detection," advises Bob Hinden, one of the creators of IPv6 and a Check Point fellow. "Most host operating systems — Windows Vista, 7, Mac OS, Linux, IOS and Android — all have IPv6 in them. Even though they may not think they have IPv6 turned on, there might be tunneled traffic coming from outside their enterprise. It's important that the enterprise know what's going on with IPv6 in their network." ■

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What keeps the NSA up at night?

BY DIRK A. D. SMITH

APPROACHING ITS 60th birthday, the National Security Agency (NSA) has a staff some 35,000 strong worldwide, and an impressive building complex in Fort Meade, Md., where the walls are lined with copper mesh to prevent electronic eavesdropping. True to its origins dating back to breaking enemy code during World War II, the agency has two primary missions: signals intelligence (SIGINT) and information assurance (IA).

Although the NSA is typically depicted as the most super-secret of federal agencies, it does post valuable reports on security best practices on its website. And Neal Ziring, the NSA's technical director of the Information Assurance Directorate (IAD), recently agreed to an in-depth interview.

What is information assurance for the NSA?

Information assurance for us is the ability for our customers, national security customers, to know that their information is only accessible to those who need it, is accessible to those who need it when they need it, that it has integrity — it hasn't been altered — and more recently, cyberdefense.

We have certain responsibilities under National Security Directive 42 and we provide cryptography for the community, certain types of defensive services, security guidance, security analysis, security architecture and engineering services, and we perform key management on the behalf of the community.

[According to NSA's website, the agency's customers include the White House, the CIA, the State Department, the chairman of the Joint Chiefs of Staff (JCS), military combatant commanders and component commands, military departments, multinational forces and U.S. allies, as well as those that use national security information systems and government contractors.]

How do you reach the vast number of people who staff your customer offices?

This was a big thing for us when we started publishing security configuration guides. We said, how on earth can we reach all of our customers? There are so many, they are so diverse; all the government, all the military, and we eventually decided that the only way we could reach all of our customers was to simply publish it to the public. It's on our website today. You'll see all these security guides and fact sheets because that is the best way to ensure, one, that we reach all of our customers, and two, that the taxpayers get maximum value out of the work that the NSA has done. [To view and download IA Fact Sheets, go to www.nsa.gov, select Information Assurance | Mitigation Guidance | Security Configuration Guides | Fact Sheets.]

From a security standpoint, what is it like to work at the NSA?

As you approach the security gate you must slow your car down to navigate a serpentine pattern of red-and-white caution-striped gates, orange traffic cones, a black SUV security vehicle, a free-standing guard, in order to reach a security gate where you present identification. In this approach a sign indicates FPCON BRAVO (Force Protection Condition, level Bravo), indicating "an increased or more predictable threat of terrorist activity exists." Watching from the other side of the gate are well-prepared guards.

When entering the building you again present your badge to security. And a third time at an electronic station. If you are the first one of your team in, you have to draw a key from a wall-mounted machine to get into your work area. Don't even think of bringing in your cellphone. Leave it in your car or check it into one of the little cubby-hole lockers at the front door. They are small; big enough for an iPhone, but not an iPad.

At work is there any way for staff to access Skype, Facebook, Gmail, LinkedIn, etc.?

[Laughter] The bulk of the staff work on the high-side network, which is the internal, classified network where we have a social networking system that we use for collaboration. For example, I keep an internal blog, we have lots of internal wikis, an internal system something like Twitter that allows sharing of short messages, an internal system that's Facebook-ish where you can post your profile and what you are working on.

Most of us have unclassified Internet access [on the low side network] at our desks because it's useful for looking up technical topics, or sending an email to your spouse to let her know you'll be late, all that sort of thing, but it's not really intended to be a system where you do a lot of personal stuff. It's for government use. The bulk of what I use it for is for corresponding with industry and academic partners with whom I am doing some sort of work.

Have you found any devices or processes that are particularly helpful in trapping security threats?

Awareness is key; having employees aware of the policies and practices that are enforced at a given point.

[Ziring adds that the NSA has spent several years working with both industry partners and customers to develop effective whitelisting strategies (and whitelisting using Software Restriction Policies) and network access control, both generally considered awkward to implement and a nightmare to maintain in a world of constant updates and configuration changes.]

We've been working on this very hard and it's been a big success. [Last November the SANS Institute awarded the IAD and its partner, the Trusted Computing Group, the 2011 National Cybersecurity Innovation Award.]

What worries the NSA?

Probably the biggest two worries for us right now are mobility and cloud computing because the government wants that functionality the way that business wants it, but looks to NSA to tell them how to be secure while doing it.

A big trend is the consumerization of IT; a lot of folks [outside of government] are bringing in personally owned devices and utilizing them for work functions. Recognizing both the benefits of such mobility and the dangers of rather powerful, connected devices managed by their owners instead of the office, the IAD released "Security Tips for Personally Managed Apple iPhones and iPads" and established the NSA Mobility Program, which recently released Version 1.2 of the "Mobility Capability Package."

We aren't publishing much on cloud; we are letting NIST be that public face, but we are providing technical input into the things that they are writing. In fact NIST, the National Institute of Standards and Technology, has just released "Guidelines on Security and Privacy in Public Cloud Computing."

Head online to read more from this interview. **tinyurl.com/6nlstet**

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Is the cloud really ready for the enterprise?

BY BRANDON BUTLER

COUPA, A 2006 startup that helps more than 200 customer companies manage purchasing and procurement, doesn't own any IT infrastructure — it is run completely from the Amazon Web Service cloud.

Business applications don't get much more mission-critical than a company's entire operations, and Sanket Naik, who leads Coupa's cloud strategy, isn't worried about being all-in with AWS, with backup capacity in other clouds, such as Rackspace. "I know there are a lot of issues and questions around the cloud, especially about security, but I think some people are just resistant to change" if they haven't yet embraced cloud, he says. Naik is completely comfortable keeping his entire business in the cloud — that's the way the company has always been.

But not everyone is as willing as Coupa and Naik to move completely to the cloud. Large enterprise customers are not yet widely using public, multi-tenant clouds for mission-critical applications, according to consultants and industry experts.

"Large enterprises continue to embrace private clouds," says Andi Mann, vice president of Strategic Solutions at CA Technologies, who recently wrote a blog post titled "Why the public cloud is a big fat enterprise fail." "IT organizations increasingly understand the risks, opportunities, roles and potential benefits of public and private cloud computing. And they're largely putting their chips on the private cloud card."

Public cloud vendors, he argues, aren't catering to the needs of enterprises around security, interoperability and reliability. The result is reluctance on the part of enterprises to embrace the public cloud for larger, more sensitive programs.

According to Gartner cloud analyst Thomas Bittman, about half of enterprise customers he works with use the public cloud for development and testing functions with the other half using it for miscellaneous applications. Few are relying on public cloud infrastructure for mission-critical applications, though.

Various studies back up the point: According to research and consultancy firm Wisegate, more than half of executive-level respondents to a recent survey indicated they would not move protected data to the public cloud because it is "too risky." Another quarter reported they have plans to investigate using a public cloud for critical application needs, but they have not yet made the change.

When asked what's holding them back, 73% of respondents indicated security as the top reason for not moving to cloud-based applications for the company's critical programs.

Some cloud services providers believe their technology is getting a bad rep.

Michael Crandell, CEO and co-founder of RightScale, which is a cloud management platform that sits between the cloud users and providers, has a simple response to the question of whether the cloud is ready for mission-critical apps: "Absolutely, resoundingly, yes."

> **"IT organizations increasingly understand the risks, opportunities, roles and potential benefits of public and private cloud computing. And they're largely putting their chips on the private cloud card.**
> **ANDI MANN,** VICE PRESIDENT OF STRATEGIC SOLUTIONS AT CA TECHNOLOGIES

"Virtually all of our customers are running production businesses in the cloud," he says, noting Coupa as one example. Security remains the top concern related to the cloud, he admits. "But public clouds have shown themselves to be as secure, if not more secure than private clouds," Crandell says.

In fact, some cloud providers are embracing the concerns around security and using that as a point of differentiation in their offering. FireHost is a Payment Card Industry (PCI) 2.0 compliant multi-tenant public cloud infrastructure offering that has more than 1,000 customers. "Security is our bread and butter," says CEO Chris Drake.

"The key to cloud security is to assume that nothing is secure," he adds. FireHost automatically encrypts customer data and gives customers the keys, meaning that no one but the customer can access the information. FireHost, he says, gleans insights from the threats it stops for each of its customers and uses those to protect the entire infrastructure. FireHost recently claimed that it blocked 19 million cyberattacks for customers during the second quarter of this year.

Still, other cloud providers say security is a "shared responsibility" between the service provider and the customer, as Rackspace CTO John Engates notes. Providers can install top-of-the-line security features, becoming government- and industry-compliant for their infrastructures. But customers have a responsibility to make sure the data they send up into the cloud and the access points to that data are secured on their end.

Engates believes there is an education process that's needed to validate the security features of providers by compliance bodies, which will ease some customers' concerns.

Some enterprise customers just may never be comfortable putting their most mission-critical applications in the cloud though, which creates a necessity for hybrid clouds, says Allwyn Sequeira, CTO and vice president of cloud networking and security at VMware. Enterprises will be willing to use the public cloud for various applications, and they will want a private cloud for their programs they're not comfortable putting in a public cloud. Having the ability to connect those two to create a hybrid environment is what he believes the future of cloud will be. "CIOs want the cloud, but they want to maintain control," Sequeira says.

But perhaps it's not the security that's holding enterprises back; maybe it's the infrastructure. "If you peel the onion back on a number of these providers, they have pretty good security measures in place," says David Goodman, director of the cloud solutions group at Unisys, which advises enterprise clients on cloud strategies.

The problem is, despite advancements the cloud can bring around agility and potential cost savings, there's just not a compelling enough reason for enterprises to move existing applications into a public cloud.

"These enterprises have made huge investments in their legacy infrastructure getting that in place," he says. "They accept cloud and are interested, but they'll be going at it at a different pace compared to small and medium sized businesses."

Startups that are building their IT infrastructure from scratch, he says, are putting everything in the cloud, without hesitation. Many enterprises he works with, though, already have infrastructure that can handle the company's IT needs. When companies have new or expanded IT needs, they are willing to go to the public cloud, he says.

As the IT needs of the business continue to outpace the resources, Goodman expects enterprises to move toward the cloud, and even be willing to put sensitive programs in the public cloud. But that, he says, will take time and continued market maturity. ■

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TOOLS

Cloud fever and TonidoPlug: Your own personal cloud

I know why you're happy . . . you've got cloud fever. You can't get enough of cloud this and cloud that so, as a change from megascale, enterprise-scale, cumulonimbus-like behemoths, let's look at something more on the wispy, happy, summer stratus-like scale. The TonidoPlug 2, which is based on the SheevaPlug and developed and marketed by CodeLathe, is a personal cloud system that is really cool, amazingly well-featured, and remarkably inexpensive.

Mark Gibbs' Gearhead

Driven by a Marvell Kirkwood MV88F6281 ARM-compliant system-on-a-chip (SoC) with a Feroceon 88FR131 rev 1 (v5l) processor running at 794.62 MHz with 512MB of RAM, this device is surprisingly fast.

The TonidoPlug is physically small (5.5 inches by 3 inches by 1 inch) and provides 512MB of flash storage for the operating system and apps, an internal slot for a 2.5-inch SATA II drive, and a single USB 2.0 port to which (obviously) USB storage devices can be attached.

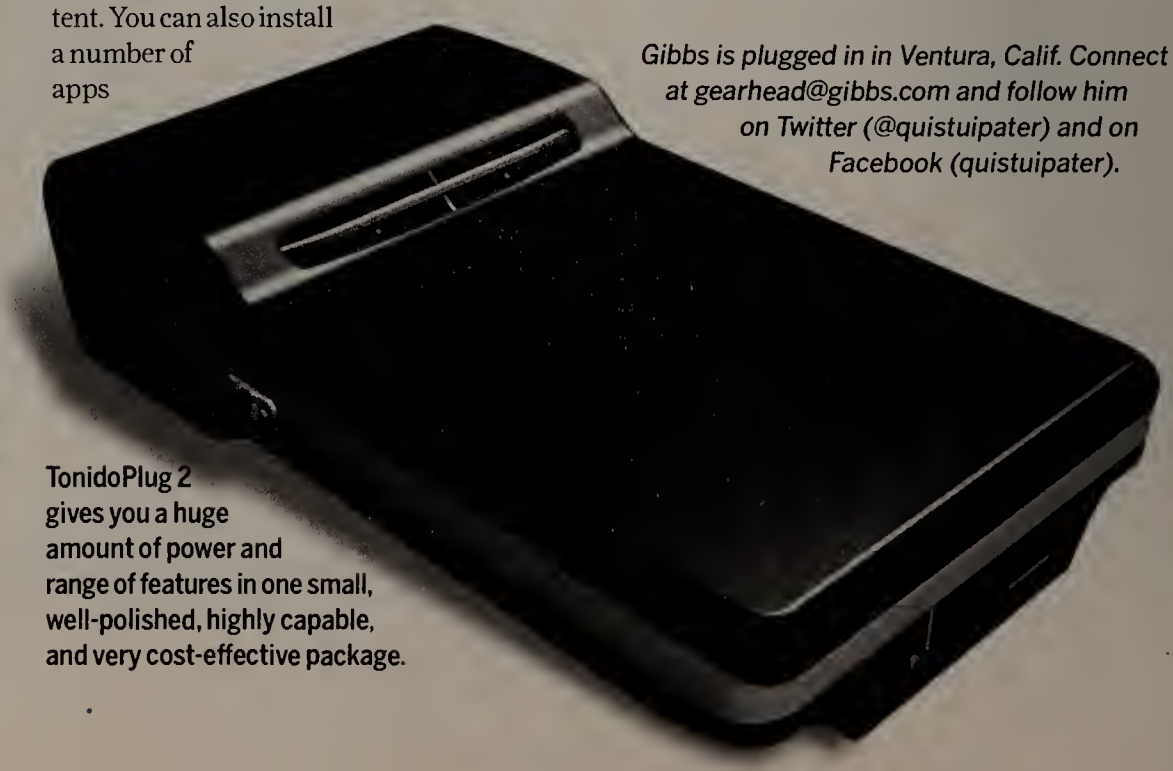
For connectivity the TonidoPlug has both wired Gigabit Ethernet and integrated 802.11b/g/n wireless.

The TonidoPlug can be plugged directly into a power socket or, through a rather clever piece of engineering, the plug can be swapped for an adapter that allows a wired power cord to be used. The TonidoPlug, which can operate on any power source from 100 to 240VAC at either 50 or 60Hz, is also miserly, drawing less than 13 watts at maximum.

And now, the software: The TonidoPlug 2 runs Debian 6.0 "Squeeze" and supports file sharing for clients on both your local network as well as the Internet. There are also free apps to provide remote access to the TonidoPlug from iOS, Android, BlackBerry and Windows 7 Mobile devices.

When you first power up a TonidoPlug it will get its network configuration via DHCP. Cunningly, you can find the local IP address of the device by going to tonidoplug.com/ip and clicking on a link that will take you to the TonidoPlug's configuration page . . . this is a very clever technique that other manufacturers would do well to emulate rather than their usual simplistic reliance on a default address.

The TonidoPlug comes with several built-in applications: Webshare for files and photo sharing; Explorer for file system browsing; and a DLNA Media Server for streaming content. You can also install a number of apps directly from the Tonido App Store, including: Sync for file synchronization; Search for file search; a personal blog called Thots; Tonido Shell for a browser-based command line; a Web browser-based BitTorrent client; Workspace, a Web browser-based collaboration software; and Jukebox, a Web browser-based music player.



TonidoPlug 2 gives you a huge amount of power and range of features in one small, well-polished, highly capable, and very cost-effective package.

You can also upgrade to TonidoPro from the App Store for $29 per annum, which increases the synchronization storage from 250MB to 50GB and adds sync capability for guest accounts.

A really interesting feature (currently in beta) allows you to set up the TonidoPlug as a relay by configuring the Wi-Fi service to work in "hotspot" mode. This makes the system behave much like the bigger, more muscly brother of the Kingston Wi-Drive.

Priced at just $119 for the drive-less TonidoPlug 2, this system gives you a huge amount of power and range of features in one small, well-polished, highly capable, and very cost-effective package. The TonidoPlug 2 gets a Gearhead rating of 5 out of 5. ■

Gibbs is plugged in in Ventura, Calif. Connect at gearhead@gibbs.com and follow him on Twitter (@quistuipater) and on Facebook (quistuipater).

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GADGETS

Bring a monitor on your next trip; 'Avengers' USB sticks assemble!

Keith Shaw's Cool Tools

14-inch USB Mobile LCD Monitor

by Toshiba, about $170

▶ **What it is:** This lightweight LCD monitor attaches to an existing computer (Windows 7, Vista or XP) and lets you either mirror or extend the display from the computer to the 14-inch display. The monitor features 1366-by-768-pixel HD resolution, and has a 400:1 contrast ratio and 16msec response time. No power outlet is needed for the monitor, as it grabs power from the included USB cable (a Y cable is provided, so you might need two USB ports on your system).

▶ **Why it's cool:** When using it in mirror mode, you can place the extra monitor behind your system to show off a presentation to other people in the room without needing them to crowd around your notebook. In extend mode, you can utilize the extra display space to multitask with your applications, just like you would on your desktop if using a larger display. When you're not traveling, you can use this in your office and create a three-monitor setup to provide even more display space. The monitor uses DisplayLink driver software to create this effect via the USB cables (no additional adapters or cables required).

I was also impressed with the unit's light weight — it can easily be placed into a laptop bag or backpack without adding too much bulk. The monitor is attached to a protective case that doubles as a stand, with Velcro straps that can adjust the viewing angle of the device.

▶ **Some caveats:** The USB Y cable is a bit short if you have a notebook where the two USB ports are not right next to each other; depending on the notebook you have, using up two USB ports might be tricky. In order to get this to work with a Macintosh notebook, you need to download a driver from the DisplayLink website (not included on the driver CD).

▶ **Grade ★★★★½ (out of five).**

The Avengers 8GB USB drives

by Dane-Elec, about $15 each (Amazon)

You can choose from the Hulk, Iron Man, Captain America or Thor.

▶ **What it is:** These are straightforward USB flash drives with about 8GB of capacity on them, but instead of a flat stick the USB dongle is attached to a mini statue featuring one of the heroes from Marvel's "The Avengers," the summer movie blockbuster sweeping the nation. You can choose from the Hulk, Iron Man, Captain America or Thor. The USB dongle slides out from under the unit, so you can retract it and just display the device on your desk as if it were a miniature action figure.

▶ **Why it's cool:** Dude, it's Iron Man and a USB flash drive. 'Nuff said. Also, for an extra $20 you can buy an "Avengers"-themed USB hub (sold separately) with four slots that can accommodate your heroes.

▶ **Some caveats:** In order to see the character while connected to your PC, you need to have a left-side USB slot, otherwise you see it from the back. Also, there's no bundled software like a backup utility or extra content like "Avengers" wallpaper (some "Star Wars"-related USB drives add some additional pictures and stuff).

▶ **Grade ★★★★**

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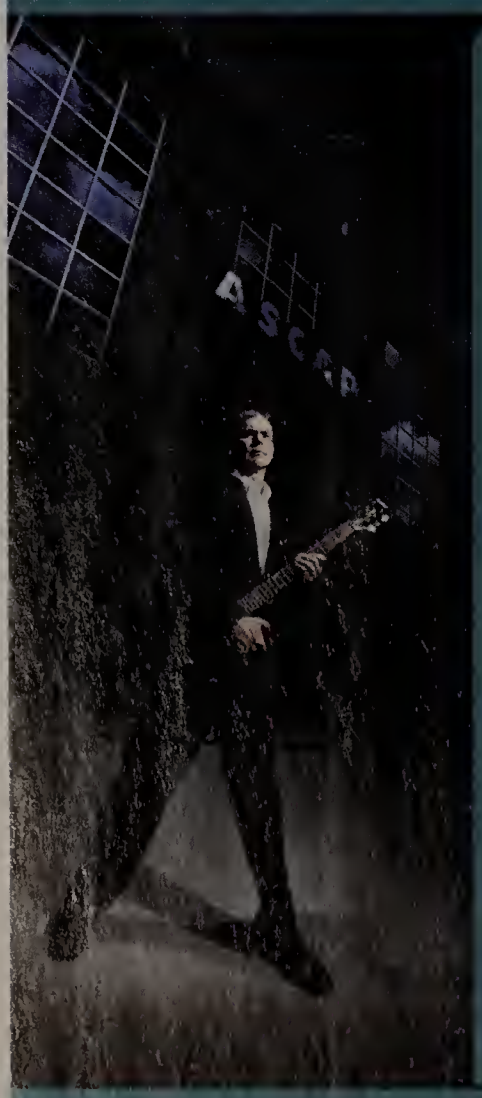

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online

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ILLUSTRATION: JEAN FRANCOIS PODEVIN
PHOTO: KEN REID

SaaS takes flight

But providers need to **tackle integration**, **customization** and **brokerage issues** before SaaS can reach its full potential

BY CHRISTINE BURNS

Software as a service has some wildly successful poster boys such as Salesforce.com, Google Apps, NetSuite, Workday, ADP and Concur. Every new independent software vendor is developing for the SaaS market. And for the established software companies, it's a case of articulate and deliver on a cloud strategy or die.

On the enterprise customer side, there is an increasing familiarity with the SaaS delivery model; continued pressure on IT budgets; and a growing comfort level with the security and performance parameters of cloud computing.

So, why isn't the SaaS market bigger? What's holding it back?

Gartner pegs total worldwide software revenue at $267 billion in 2011 and expects it to hit $288 billion this year. But Gartner puts worldwide SaaS revenue at only $12.3 billion and $14.5 billion, respectively, which comes out to less than 5% of annual software sales.

"At 10 years old, or 10 years young — however you want to specify its age — SaaS has the power to change everything. It should be viral, like a really hilarious YouTube video. And it just isn't. Why not?" asks Jason Currill. He is CEO of Ospero, a U.K. startup looking to use its VMware cloud running on an infrastructure-as-a-service (IaaS) platform to build a better SaaS delivery channel across Europe.

According to Gartner research director Sharon Mertz, the two key factors inhibiting widespread SaaS deployments in North America are the lack of customization available in large, multi-tenant cloud applications, and the dearth of real integration between SaaS applications and existing on-premise systems.

That's not to say that SaaS isn't growing. By IDC's accounting of worldwide SaaS market revenue — which includes cloud applications, application development and deployment, and system infrastructure software — sales will balloon to $53.6 billion by 2015 at a compound annual growth rate of about 26%. At that point, IDC expects that SaaS will represent 73% of public cloud services revenue.

IDC also asserts that SaaS will grow faster than traditional software and will comprise 80% of the software delivered by new ISVs. By 2015, nearly $1 of every $6 spent on packaged software, and $1 of every $5 spent on applications, will be consumed via the SaaS model, according to a recent IDC report.

So, even though SaaS is growing at a healthy clip, these projections say that three years from now SaaS will still be below 20% of the total software market.

The good news is that existing SaaS vendors are teaming up to address the issues identified by Mertz and others. And cloud service brokerages are emerging to help enterprises manage multiple SaaS deployments.

Robert Mahowald, research vice president of SaaS and cloud services at IDC, sees back-end data integration between SaaS vendors as a significant step toward ubiquitous SaaS adoption. He pointed to the recently announced partnership between CRM giant Salesforce and business expense management vendor Concur as an example. This partnership — dubbed Concurforce — links the data collected and managed within the two

Brokerages are in a good position to negotiate with SaaS applications vendors because they can tap into the economies of scale of bringing many customers to any brokered application.

DARYL PLUMMER,
MANAGING VP AND GARTNER FELLOW, GARTNER

SaaS systems, so that customers can make choices on which business to pursue based on how much they have to spend on each sales effort.

"This kind of stitching together of composite applications is going to make customers living with their current systems reconsider what future applications driving their businesses are going to look like," Mahowald says. The incentive for SaaS vendors to enable this level of data integration is all in the numbers. "In this deal alone, Salesforce gets pass-through access to Concur's 15,000 customers and Concur can tap into Salesforce's couple of hundred thousand accounts," he says.

When pressed about other such SaaS application marriages on the horizon, Mahowald would only say that he'd heard rumors about several deals that have not been consummated mainly because the business rules around selling these intertwined SaaS products into existing enterprise customers have yet to be worked out.

But customers should push vendors to build these kinds of cross-cloud connectors into SaaS applications at the stack level, says Mahowald, because when the software is running in the cloud and not on-premise, customers don't really have the option to make the connections themselves.

Stefan Ried, principal analyst at Forrester Research, says back-end advancements in SaaS will enable business-to-business cooperation among different customers of the same multi-tenant application.

One of the underlying security questions continually posed to the young SaaS market was how one customer's data was going to be securely isolated from other customers' data, Ried says. But next-generation SaaS providers "will enable you to have controlled availability of your data to partners using the same SaaS application," he says. As an example, vendors that offer complementary products and both use Salesforce.com could share customer contact information to help facilitate sales, but could block one another from seeing other confidential information also stored in the Salesforce.com cloud.

Andrew Greenway, global cloud computing lead at Accenture, a global IT management firm, contends that data management between SaaS applications is only part of the SaaS proliferation equation. "We've got to figure out how to better manage master data flowing across all SaaS and non-SaaS applications in the enterprise," he says.

Bring in the middleman

Industry analysts across the board assert that an orchestrated move away from the existing "load software on a pallet and ship it out" software distribution channel

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A cloud should be more than data storage. It should let you shape that data with drag-and-drop interoperability. It should offer a choice between managed or unmanaged system infrastructure. It should work seamlessly with other clouds. It should be massively scalable in a matter of minutes, with ultra-high levels of security every minute of every day. Welcome to the cloud other clouds look up to. Welcome to the Uppernet. verizon.com/cloud
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and toward an emerging class of cloud delivery intermediaries called cloud service brokerages (CSB) will be another driving force in SaaS.

CSB was the phrase for cloud arbitrage that Gartner coined in 2009. More recently, NIST defined this category of service providers as "an entity that manages the use, performance and delivery of cloud services and negotiates relationships between cloud providers and cloud consumers."

Practically speaking, CSBs are the middlemen that aggregate SaaS applications in the cloud and supply a portal through which its customers can buy, access and somewhat control the use of multiple multi-tenant cloud applications within their own companies. The broker negotiates a good price that is passed onto the customer, provides a single point for end users to sign onto these applications and presents the IT department with one monthly bill.

Several industry analysts and IT practitioners say that with as few as three disparate SaaS applications, a customer can benefit from a CSB's aggregation services. But all were in agreement that once that number hits double digits, a CSB becomes a necessity.

According to analyst Daryl Plummer, the Gartner definition of CSB has recently been expanded beyond simple application curating to include customization and integration services. Brokerages are in a good position to negotiate with SaaS applications vendors because they can tap into the economies of scale of bringing many customers to any brokered application, explains Plummer.

"And passing on that good price to the end user is an important part of the deal. But a broker has also got to be able to justify its own added value," Plummer says. And that justification can come by exemplary customization of the SaaS products on offer in the CSB's marketplace as well as integrating them with a customer's on-premise software.

Sprint has just rolled out its Wholesale Cloud Services bundle geared toward other service providers that want to broker services to the SMB market.

Tom Nelson, marketing director for this service, says the business case is simple: "The cloud landscape is a complex, overcrowded one. If we can help reduce that complexity and provide integration and security on top of that, it's still going to be cheaper to have us do it than to have their IT staff do it themselves."

Behind the CSB's portal

The technological underpinnings for the CSBs are provided by cloud brokerage enablement firms such as AppDirect, Jamcracker, Parallels and Standing Cloud (see "SaaS delivery companies to watch," page 30). These providers have developed the products that help CSBs quickly aggregate SaaS applications, organize them into "marketplaces" tailored to specific regional or industry segments, and build the unified management portals across the involved applications.

Right now it's unclear who these brokers will be over the long term. Currently, traditional value-added resellers (VAR), large telcos, regional carriers, established system integrators and even some IaaS vendors are assembling CSB portfolios to help in the widespread distribution of SaaS applications.

Insight Technology Solutions, a large, global Microsoft VAR based in Tempe, Ariz., employs Parallels Automation and PA for Cloud Marketplace to drive its email and collaboration CSB offerings. According to William McCarthy, senior vice president of Insight Managed and Cloud Services, his division pulled in about 6% of the VAR's overall $5.3 billion revenue in 2011.

But McCarthy is looking at 30% to 40% annual growth in cloud services due to the brokerage business. He's particularly hopeful about how business intelligence reporting can be built into a brokered service. "To be able to sell a value add that would provide customers with business intelligence between its back-office applications, for example, and accounts receivable would be a huge advantage," he says.

Christopher Smith, a marketing executive at Cambridge, Mass.-based Cloud Technology Partners (CloudTP), agrees that real-time business analytics will be a key CSB differentiator going forward. "It's a great benefit to any company — small, medium, or large — to have all that data examined in real time and be able to put it to a real business use from wherever their employees are located," he says.

Do you want to go wide or deep with CSB?

Gartner analyst Tiffani Bova says there are two segments of CSB evolving: wide, those centered on aggregating a set of standard back-office applications that can be used across a wide range of customers; and deep, those comprising a bundle of SaaS applications that serve a specific industry segment.

"The SMB market is ripe for broad brush CSBs," Bova says.

Cincinnati Bell is hoping to tap into its existing 30,000 strong SMB customer base, to which it currently supplies dialup, broadband, hosting and wireless services, for a big bump in CSB revenue as it builds an aggregated SaaS offering using Parallel's marketplace software.

According to Dave Heimbach, senior vice president of business and carrier markets, consuming SaaS as an integrated bundle of email, shared calendaring, email archiving, collaboration, cloud-based payroll and accounting, and hosted telephony, "is very palatable to that market."

VPS.net, a cloud hosting provider based in Salt Lake City, Utah, is using Standing Cloud's Application Marketplace to offer its clients an "Office in a Box" SaaS bundle. "The downside of the SaaS marketplace model is that I have to take whatever SaaS applications they've decided to offer and make it work for my business," said VPS.net managing director Rus Foster. "The upside is that by having Standing Cloud manage all the technical details of running those apps, I can focus on building the business around them."

As an IT consultant helping enterprise customers pull SaaS into existing networks, Kacy Clarke, principal architect at CloudTP, sees industry-specific SaaS aggregation as the bigger play. Consider the unique deployment and regulatory issues in retail, or finance, or healthcare, Clarke says. "Having an aggregated back-office suite, billing system, and reconciliation application that all comply with all the specific regulations or deployment requirements of your particular industry would be a big gain." ■

Burns is a freelance writer and editor who has over 15 years experience covering the networking industry. She can be reached at cburns1227@googlemail.com.

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BY CHRISTINE BURNS

ASCAP's John Johnson picks Salesforce.com for cloud services.

ASCAP ROCKS THE CLOUD

American Society of Composers, Authors and Publishers **saves money**, **gains business agility** with Salesforce.com

PHOTO BY KEN REID

Over the years, our main mode of music consumption went from vinyl to 8-track tapes to CDs to iPods to services like Pandora and Spotify that can stream music to just about any device.

Similarly, the American Society of Composers, Authors and Publishers (ASCAP) started with ledger cards, moved to a mainframe, migrated to SQL Server, upgraded to Lotus Notes and landed in the cloud with Salesforce.com. John Johnson, vice president of licensing operations and systems for ASCAP, says the decision seven years ago to push his organization's business into the cloud was merely a natural progression.

ASCAP, founded in 1914 by a charter membership that included John Philip Sousa and Irving Berlin, is a performing rights organization (one of only three in the country) that maintains licensing agreements between its 435,000 members and the individuals,

media outlets and businesses that consume the music.

The outfit is headquartered in New York, but runs all of its licensing operations out of Nashville. The company's 300 employees — working mostly from home offices across the country — negotiate music usage licenses under federal copyright laws, collect royalties, and pursue legal means as a last resort to ensure that artists are properly compensated for their work used in public ways.

That's certainly a lot to keep track of. ASCAP's Lotus Notes deployment in 1993 was cutting-edge at the time, Johnson says. And it greatly helped the company reduce the complexity of what is a very paper-intensive process that was once handled across 26 brick-and-mortar regional offices spread around the county, most of which did not follow any centralized business processes. The Notes consolidation pulled all the company's data to a centralized office in Nashville. This solved the company's data management issue for more than 10 years.

But by 2005 the implementation had ballooned into 21 Notes databases stored across four different servers that weren't all speaking to each other, Johnson explains. In order to get a snapshot of its data set to make strategic business decisions, Johnson's IT team had to put it all into a SQL database and do the analysis from there. "By the time we'd do that, it's a week later and we'd lost any strategic positioning the snapshot should have given us," Johnson says.

"So it was getting that centralized way to strategically view the data we needed to drive our business in real time from all our different locations that pushed us into the cloud," he says.

So that year, ASCAP bought into the Salesforce.com SaaS CRM scheme, purchasing almost 200 licenses of various flavors to tap into both Sales Cloud — which provides ASCAP representatives with tools for managing accounts, contacts and business opportunities, and for instant collaboration — and Service Cloud, which is a social networking-like customer service platform.

ASCAP has also bought into the Salesforce.com AppExchange, a network of applications that Salesforce partners have built with native ties to Salesforce's applications. Specifically, the company uses Drawloop, an iPad app the lets a user generate documents in the cloud, and SalesFusion, an application that integrates marketing and demand generation processes with sales and CRM data to improve marketing to sales integration.

Some of the monetary savings ASCAP realized immediately included not having to dedicate multiple IT staffers to develop for and administer the Notes systems. "If you take the cost of those salaries alone, the Salesforce SaaS paid for itself in the first year," Johnson says. There was also the hard savings of being able to decommission the physical servers.

"But I think the biggest cost savings that you have to factor into this overall picture is what it would have cost us to do business with the agility that we have now without having SaaS in the picture," says Johnson, admitting that he really has no way to accurately measure that parameter because Salesforce has totally changed the way ASCAP does business.

ASCAP ventured into the cloud with Amazon and Google as well. Johnson explains that his team was able to consolidate a 2,000-square-foot warehouse full of filing cabinets staffed by two full-time employees onto 130GB of scanned documents stored in Amazon's Simple Storage Service cloud for only $20 per month, and that price includes access to all of the archiving and search software that helps ASCAP employees find what they are looking for more quickly. Johnson says this part of ASCAP's move to the cloud resulted in a $100,000 savings.

And the company two years ago moved to Gmail for its cloud-based email service.

Johnson says his team has built more than a dozen customized applications that tap into the Salesforce.com cloud that do everything from accounting for employee vacation and sick time, to equipment assignments and copyright infringement litigation tracking.

In terms of mobile applications — another major market driver for SaaS deployment — Johnson's users can via iPad access almost anything they need to do within the Salesforce cloud. "Mobility is not something that we've needed to develop internally, because we've inherited all the native mobility that Salesforce has built into its platform," he says.

In terms of future use of the cloud, Johnson says that every business process the company employs today is a cloud candidate.

"Anything we can do in the cloud to maximize our return while minimizing the number of resources we have to dedicate to it, is fair game," Johnson says.

Lessons learned

Johnson has a long-term vantage point on two of the SaaS hot-button issues: security and performance.

"Being a longtime customer, we've watched carefully as SaaS security has improved over time," says Johnson, who added that ASCAP's requirement for role-based security has always been meet. There were early issues with tokenization, but those have all since been addressed by Salesforce.com and its partners.

Johnson was concerned about performance when there were issues in that regard with the Salesforce.com platform just after ASCAP migrated to the cloud. "But we lived through some major system changes on the Salesforce platform in 2006, and performance has been incredible since then," he says.

Johnson does have one complaint about his company's playing in the cloud: that this model enables serious application data sprawl. "Storage is just so cheap that you really have to be disciplined about setting up your purge criteria, otherwise you'll end up holding onto data that you just don't need for a very long time," he says. Salesforce.com does supply all the reporting tools that let you aggregate the types of data you've got stored in the application and how old that data is, "but you still need a business analyst to routinely examine those reports to make those kinds of purging decisions," he says.

By Johnson's own admission, ASCAP is entrenched in — and completely satisfied with — the Salesforce.com cloud. But if something catastrophic happened to the Salesforce.com platform, or a competitor came along with an offer he couldn't refuse, does he have an exit strategy?

"Yeah, I'd be irresponsible if I hadn't thought about it. We'd have to time it with a contract negotiation," Johnson says. "But it's not a project I would embrace with open arms." In spite of all the promises of SaaS application agility in the cloud, moving all of your business processes to another cloud platform "is quite a bit more than just flipping a switch," he says. ■

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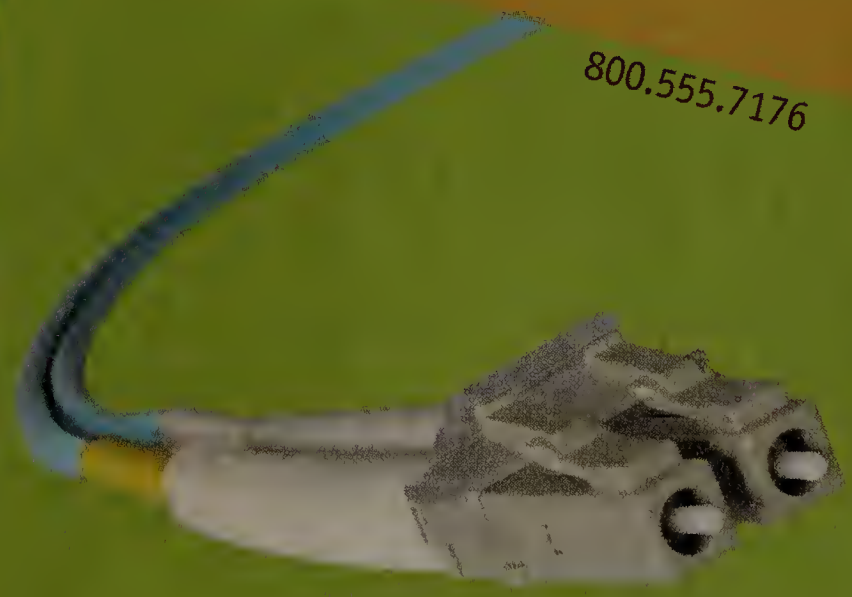

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POWERFUL COMPANIES

10 MOST POWERFUL SaaS DELIVERY COMPANIES

ANALYSTS and industry watchers agree that the next frontier for SaaS is setting distribution channels designed specifically for the cloud and providing mechanisms for managing multiple SaaS offerings from a single control point. These advancements will likely come from a variety of sources: established SaaS vendors, startups providing SaaS channel enabling software, and cloud service brokerage houses. Here are 10 to watch, listed in alphabetical order.

1 || AppDirect HEADQUARTERS > SAN FRANCISCO

Think of the AppDirect Ecosystem as a marketplace as a service (MaaS) which provides the platform for cloud service brokerages (CSBs) to build bundled SaaS offerings for regional, business process-focused or vertical markets. Among the SaaS applications aggregated into this platform are Google Apps, Office 365 and TribeHR. Some of the CSBs that have bought into AppDirect's platform are Bell Canada and Deutsche Telekom. CONTINUED ON PAGE 32

BY CHRISTINE BURNS

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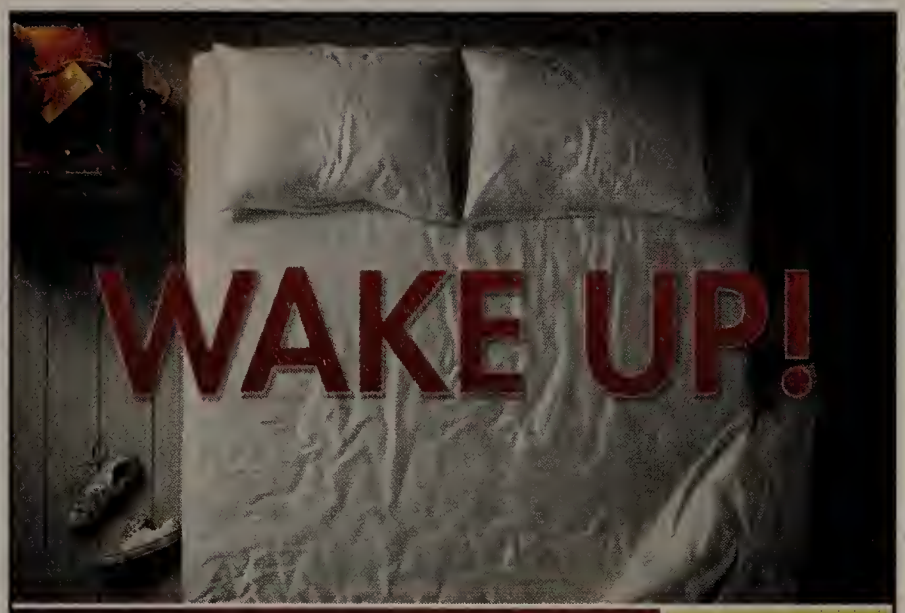

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CONTINUED FROM PAGE 30

2 || Concur

HEADQUARTERS > REDMOND, WASH. Concur is a leading provider of integrated travel and expense SaaS. It's got 15,000 existing users and a grand plan to get many more thousands, thanks to a tight partnership with Salesforce.com. Dubbed Concurforce, the partnership allows for data integration between the two SaaS offerings so that companies can understand how expenses are directly correlated with reeling in new sales leads. Since expenses touch everything, it will be interesting to see with which other software builders Concur will align its data.

3 || Ingram Micro

HEADQUARTERS >
SANTA ANA, CALIF.
According to the recently published Cloud & Technology Transformation Alliance's (CTTA) State of the Cloud Channel Report, Ingram Micro has the mindshare advantage among traditional software distributors when it comes to convincing software makers they've got a solid strategy for distributing SaaS going forward. That said, the report also states that this segment of the SaaS delivery channel has been a bit stymied by an inability to find cloud-experienced sales and technical staff.

4 || Jamcracker

HEADQUARTERS >
SANTA ANA, CALIF.
Jamcracker has a long history — 13 years, in fact — in aggregating and distributing on-demand services through a global ecosystem of service providers, resellers, system integrators and ISVs, called the Jamcracker Services Delivery Network (JSDN). Services available through the JSDN include messaging, collaboration, security, online data backup, wireless, and business productivity solutions from Microsoft, Cisco, McAfee, BlackBerry, IBM, Google, and dozens of other cloud providers.

5 || NetSuite

HEADQUARTERS >
SAN MATEO, CALIF.
NetSuite is an undisputed leader in the accounting and ERP segments of the SaaS market. It's followed the Salesforce.com model of building its SuiteApp.com applications marketplace around its core offering. But the company has also forged several key partnerships under its SuiteCloud program — including with Google Apps, Salesforce.com, SAP and Oracle — to provide complete integration between its on-premise and cloud applications.

6 || Ospero

HEADQUARTERS >
LONDON, ENGLAND.
Ospero is an infrastructure-as-a-service (IaaS) vendor that is looking to use its underlying federated VMware cloud running on a VCE Vblock hardware to build a better SaaS delivery channel into the enterprise across Europe. The company calls the prospect distribution as a service (DaaS), and the goal is to help SaaS vendors roll out global instances without the worry of legal data residency.

7 || Parallels

HEADQUARTERS >
SEATTLE, WASH.
Parallels has a long history in and around virtualization and cloud computing. It's got significant experience as the provider of infrastructure, application and end-user cloud enablement software and it takes all three levels into account as it has developed its SaaS marketplace software. Among its customers are Cincinnati Bell, Insight, Apptix and Sprint.

8 || Salesforce

HEADQUARTERS >
SAN FRANCISCO.
This SaaS giant cannot be ignored due to its track record for success in the cloud. With its 200,000-customer base, it's no wonder that its AppExchange marketplace for complimentary products has ballooned to include more than 1,400 applications. It will be interesting to see how Salesforce.com opens up deeper integration between the products to help drive SaaS sales deeper into corporate IT.

9 || Standing Cloud

HEADQUARTERS >
BOULDER, COLO.
Standing Cloud provides cloud application management services built on a platform-as-as-service (PaaS) offering that supports multiple programming languages, including Rails, PHP, Java and Python, and a wide range of cloud service providers and orchestration software systems. It also offers a standard application catalog that includes 100 open-source and commercial applications.

10 || Workday

HEADQUARTERS > PLEASANTON, CALIF. Workday was founded in 2005 by co-CEOs Aneel Bhusri and Dave Duffield and currently offers cloud-based human capital management SaaS that can analyze workforce expenses and manage the process of paying staff. And it's making good money at it, too. We're watching this firm closely because it's staring down on-premise competitors Oracle and SAP. This is turning into a battle of might against agility, and should result in some interesting twists on how to deliver SaaS smarter, quicker, cheaper.

NETWORKWORLD

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BACKSPIN | BY MARK GIBBS

Online propaganda and the NDAA

WHEN IT comes to the government we accept, at least theoretically, that it should keep us ignorant of some things; these are things that we conceive of as being so dangerous that we are better off not knowing about them.

Of course the problem with this tacit knowledge that state secrets exist is it makes it really easy to hide stuff we should know about. Ignorance often only feels like bliss.

But when it comes to our government telling us lies — for example, that Saddam Hussein had weapons of mass destruction so we needed to attack Iraq — that's where we run into really dangerous territory. Where the government can "get away" or, worse, is allowed to misrepresent the facts, the potential for intentional manipulation of public perception is enormous and, many would argue, inevitable.

Now, in 1948 the Smith-Mundt Act was passed. This act was intended to allow the United States government to counter the perceived communist threat by allowing the use of propaganda. The act included specific prohibitions to prevent the State Department from using propaganda within the U.S. In other words, the potential for propaganda to violate citizens' rights was recognized and dealt with.

Fast-forward to today and consider the National Defense Authorization Act (NDAA), also known as the "Homeland Battlefield" law, which would permanently suspend due process and habeas corpus for anyone the federal government accuses of being involved in hostile actions against the United States, or being an "associated force" of terrorists. In other words, if you're accused and detained you can be held indefinitely.

That's a pretty bad idea, eh? Wait! It gets better! Rep. Adam Smith, D-Wash., and Rep. Mac Thornberry, R-Texas, have offered amendments to the NDAA which would allow the United States to counter al-Qaeda's spreading of anti-American ideas. Sound like a slippery slope? You bet, but wait again, there's more! What medium is being targeted as the battleground for a propaganda war? Yep, you guessed it: the Internet.

Smith argues that al-Qaeda is infiltrating the Internet in order to drive anti-American sentiments: "Effective strategic communication and public diplomacy should be front-and-center as we work to roll back al-Qaeda's and other violent extremists' influence among disaffected populations. An essential part of our efforts must be a coordinated, comprehensive, adequately resourced plan to counter their radical messages and undermine their recruitment abilities. To do this, Smith-Mundt must be updated to bolster our strategic communications and public diplomacy capacity on all fronts and mediums — especially online."

I don't know about you. but the idea of a U.S.-sanctioned online propaganda war is extremely worrying to me. If there was ever a case where a government program could overreach, this is it. We need government that is transparent and accountable, not an Orwellian state machine that tells us war is right and that having secrets and spreading misinformation will keep us safe. ■

Gibbs, in Ventura, Calif., knows the truth is out there. Set him free at backspin@gibbs.com and follow him on Twitter (@quistuipater) and on Facebook (quistuipater).

NETBUZZ | BY PAUL MCNAMARA

Please don't dismiss this frivolous lawsuit

NOW HERE'S something you don't see every day: The Electronic Frontier Foundation — that stalwart defender of all rights digital — is urging a California court *not* to dismiss a frivolous lawsuit.

Why? So that the cable TV host who dragged the matter into court will get a taste of California's no-nonsense law designed to discourage legal bullying of online commenters, instead of letting her scurry off to a more plaintiff-friendly arena, which in this case would be Illinois.

The plaintiff is Corri McFadden, host of a cable TV show about fashion called "House of Consignment," which I had not heard of before last week. McFadden sued a website called Purseblog.com in a California federal court after a commenter on that site accused McFadden's designer-goods company, eDrop-Off, of undermining the fairness of its eBay auctions through the use of "shill bidding," which means fake bidding by the auction house intended to drive up prices.

While I use eBay no more often than I watch fashion shows, it became quickly clear from reading discussions about this case that allegations of "shill bidding" online are roughly equivalent to expressions of shock over gambling at Rick's Café. In other words, whether real or unfounded, such suspicions are so commonplace as to be scarcely noteworthy, never mind the foundation of a legitimate libel complaint.

Moreover, Purseblog.com didn't accuse McFadden's company of shill bidding; that was the opinion of one of that site's users. Federal law provides broad protection to the hosts of online forums against legal liability for the views expressed by third-party contributors. Were that not the case, you might not be able to leave a nasty comment on this column because few websites would be willing to accept the risk of getting sued over every ill-received point of view.

California goes a step further with its law designed to discourage so-called SLAPP (strategic lawsuit against public participation) lawsuits. In essence, it evens the playing field (somewhat) by allowing the target of a frivolous lawsuit to recoup the costs of mounting a defense from the deep-pocketed bully.

None of which can stop a determined plaintiff from filing a lawsuit, of course.

In this case, after the court denied McFadden a temporary restraining order, her attorneys apparently accepted the obvious — that they had no case — and asked that their complaint be dismissed without prejudice. Such an outcome, not coincidentally, would allow McFadden the opportunity to hound Purseblog.com once again through a separate suit filed in Illinois.

That's where the EFF stepped in and said, "Hey, your honor, do the right thing here and please don't dismiss this ridiculous lawsuit."

"This is a classic SLAPP suit — strategic litigation against public participation — and McFadden should have to face California's tough anti-SLAPP law, which lets defendants move to strike frivolous lawsuits and recover costs and fees if they win," said EFF Senior Staff Attorney Marcia Hofmann. "The plaintiffs set the stage by choosing to file their suit in California. The court should finish the case there as well, protecting Purseblog.com's speech rights by applying California law."

Throw the book at her, California. Heck, hit her with a designer handbag. ■

Have a tale of shill bidding to share? The address is buzz@nww.com.

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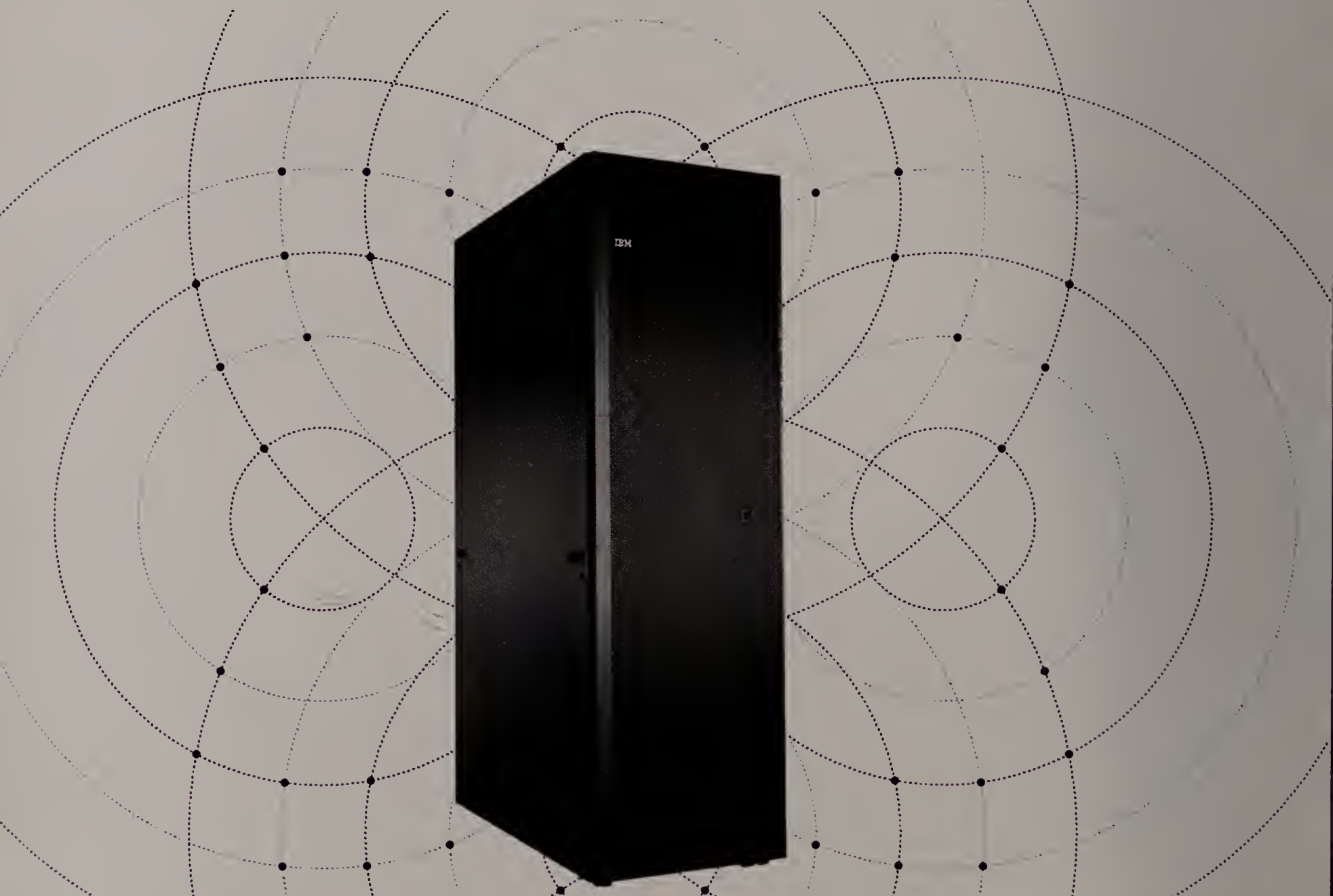

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